Kentucky Department of Education
2001 **KY-2A**

Program Description/Textbook or Print Instructional Material

Vendor: Macmillan/McGraw-Hill A Division of The McGraw-Hill Companies Web Address: http://www.mhschool.com

Title: Macmillan/McGraw Hill Science

Author: Richard Moyer, Lucy Daniel, Jay Hackett, H. Prentice Baptiste, Pamela Stryker, JoAnne Vasquez Copyright: 2002©

ISBN: See Attachment A Course/Content Area: Grades K-6 Science

Intended Grade: Grades K-6 Readability Level: At Grade Level

List Price: : See Attachment A Lowest Wholesale Price: : See Attachment A

FEATURES*

*Disclaimer: The features of each book or program were developed by the publisher and do not reflect the opinion of the State Textbook/Instructional Materials Review Team, State Textbook Commission, nor of the Kentucky Department of Education.

Content

Macmillan/McGraw-Hill Science is a Kindergarten through sixth grade science series. Each grade of the program provides comprehensive coverage of earth, life, and physical science topics. Macmillan/McGraw-Hill Science is a science program that ensures that a good, solid science education can be achieved by all students. This program makes science accessible to all students by teaching science in three ways: by doing inquiry-based activities; by visualizing science content with visuals, charts, and diagrams; and by reading science content. Since accuracy is very important in any basal program, in addition to Macmillan/McGraw-Hill's standard accuracy checking procedure, the National Geographic Society reviewed this program as well.

Science Content--Every Lesson begins with a question, raising student interest and preparing them for lesson content. Vocabulary is introduced at the start of every Lesson. For every grade level, when vocabulary words are used for the first time in the Lesson content, they are highlighted in yellow. The "Get Ready" feature at the beginning of each Lesson helps students to get focused on the lesson content by posing engaging and thought-provoking questions. Science Process Skills are also introduced at the start of each Lesson. The students learn and use this skill throughout the Lesson. After the students have completed or read the Explore Activity (although it is recommended that the Explore Activity be done, it is also possible to simply read the activity or watch the activity on video tape), they are ready for the science content of the Lesson. These Lessons provide students with student-friendly prose that is linked to rich, relevant visuals. These visuals enable visual learners to understand lesson concepts more fully. The "Read to Learn" feature, found at the start of every Lesson's content section, always sets the purpose for reading by identifying the main idea. The "Reading Diagrams" feature improves student understanding of important science concepts and prepares them for standardized tests. Also found in the content section of the Lessons are the ongoing assessment questions. These red questions found throughout the Lesson provide a roadmap for reading and also serve to frequently test student understanding of science concepts.

Interdisciplinary connections—In the pupil edition teachers are provided opportunities to integrate other disciplines. For each chapter in the program teachers will find links to math, reading, writing, literature, technology, social studies, art, and health.

Student Experiences

Macmillan/McGraw-Hill Science is a student-centered program that is written in a grade-level appropriate and motivating style. The student is always the focus of attention, is the scientist, in Macmillan/McGraw-Hill

Science. Students are always actively engaged in learning science and are frequently informed how science topics relate to their everyday lives.

Student-centered Hands-On Activities—The activities found in Macmillan/McGraw-Hill Science serve as springboards to establish concepts and provoke thought and discussion. The activities provide opportunities for real-life problem solving and inquiry. Hands-on activities are found in every Lesson in the program. Each Lesson begins with an Explore Activity. These Explore Activities invite the students into the learning experience with a focused question for them to explore. The focused question gets the students involved in a concrete, hands-on, learning activity, which uses simple, easily accessible materials. This activity never tells the students what they are going to learn, but serves as a springboard for making students curious about learning science content.

Visualizing Science Concepts—the charts, graphs, maps, tables, diagrams, and photographs found throughout Macmillan/McGraw-Hill Science present information in a variety of ways, and questions are frequently asked to verify students' understanding. Transparencies are also provided for many of the interactive visuals found in the program. Other student-centered materials that address diverse learning needs are listed on page 2 of Attachment A.

Assessment

In the Pupil Edition, every Lesson ends with Lesson Review tasks. In the primary grades, the children are asked to "Stop and Think." In Stop and Think, children have opportunities to tell about (or write about) what they have learned in a particular Lesson. At the Chapter Level, students are assessed on Vocabulary, Science Ideas, and Science Process Skills. In the intermediate grades at the Lesson level, students are asked "Why It Matters" and to "Think and Write." There are also Critical Thinking questions provided at the end of every Lesson. At the chapter level, students practice Vocabulary, Test Prep questions, and Science Concepts and skills. The Assessment Book with Answer Key has two chapter tests for every Unit and a Unit Performance Assessment test with scoring rubrics. At all grades, students encounter red check-mark questions through the pupil edition; these on-going assessment questions frequently test students' knowledge throughout the Lesson.

Organization

At grade K the program is divided into 6 Units containing earth, life, and physical science topics. Earth, life, and physical science topics are found within Units, such as A Pond, or A Tree. At Grades 1-6, the program is divided into discreet sections on Earth, Life, and Physical science. Looking at any of the Grades 1-6 books, the green pages contain life science topics, the orange pages contain earth science topics, and the blue pages contain physical science topics. The 6 Units of the Pupil Editions are further divided into Chapters; Chapters are divided into Lessons.

Resource Materials

?? Gratis Items To Be Provided And Under What Conditions: See Attachment KY-2C

?? Available Ancillary Materials: See Attachment A

Research Data/Evidence Of Effectiveness

A Learner Verification Study was completed that included a total of 2,913 students. The results proved that test scores increased among students using the Macmillan/McGraw-Hill Science program. These scores improved for both female and male students, regardless of socioeconomic background and ethnicity.